Software Code Inspection Checklist

Date(s) of Assessment: _____ Project: _____

Assessor(s): _____ CSCI Examined: _____

_____ _____

		Y, N, NA	F, O	Comments
ACTIVITY PREPARATION				
1	Have standards been identified to clearly define the activity?			
2	Were guidelines used to prepare for the activity?			
3	Has the project submitted any request for deviations or waivers to the defined activity?			
4	Have entrance and exit criteria been established for the activity?			
5	Was an agenda prepared and distributed in advance of the activity?			
6	Was a package provided with ample time to review?			
7	Were the appropriate stakeholders in attendance?			
ACTUAL CODE INSPECTION (Process and Product)				
8	Do coding style guidelines exist?			
9	Was the code successfully compiled without errors before the inspection?			
10	Were a reader, author, and moderator present?			
11	Was the preparation time recorded for each person inspecting the code?			
12	Was the code inspection kept on track and focused on identifying defects, as opposed to solutions?			
13	Is the code a complete and a precise implementation of the design?			
14	Are the same format, invocation convention, and structure used throughout?			

Y=Yes, N=No, NA=Not Applicable, F=Finding, O=Observation

For more information, please visit the NASA GSFC Software Assurance Website, at http://sw-assurance.gsfc.nasa.gov.

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15	Does the code conform to the coding style guidelines and specified standards?			
16	Does the code identify each component uniquely?			
17	Is safety critical software code highlighted and uniquely identified?			
18	Does the code protect against detectable runtime errors (e.g., range array index values, division by zero, and out of range variable values)?			
19	Does the code contain or reference historical modifications and the reason for them?			
20	Are comments clear and accurate?			
21	Did the moderator summarize the defects to the inspection team at the conclusion of the review?			
INSPECTION DEFECT IDENTIFICATION				
22	Were there design defects (i.e., the functional description does not meet the requirements specification)?			
23	Were there logic defects (i.e., the logic is missing, wrong, or extra information)?			
24	Were there syntax defects (i.e., the syntax does not adhere to the grammar of the design/code language defined)?			
25	Were there standards defects (i.e., the code does not meet the software standards requirements. This includes in-house standards, project standards, and standards invoked in the contract)?			
26	Were there data defects (i.e., missing, extra, or erroneous data definition or usage)?			
27	Were there interface defects (i.e., incompatible definition/format of information exchanged between two modules)?			

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28	Were there return code/message defects (i.e., incorrect or missing values/messages sent)?			
29	Were there prologue/comment defects (i.e., the explanation accompanying the design/code language was incorrect, inexplicit, or missing)?			
30	Were there requirement change defects (i.e., changes in the requirements specification which is the direct and proximate reason for the required change in the code)?			
31	Were all defects recorded?			
POST REVIEW ACTIVITIES				
32	Did all designated parties concur in the acceptability of the Code Review			
33	Were minutes and all defects distributed to the inspection team?			
34	Are defects being maintained, tracked, and resolved?			
35	Are there any risks, issues, or request for actions (RFAs) that require follow-up?			
36	Is there a process in place for reviewing and tracking the closure of risks, issues, or RFAs?			
37	Is there a process in place to control and maintain the code inspection materials throughout the project/product life cycle?			
38	Were Lessons Learned addressed and captured?			
REFERENCE ITEMS/DOCUMENTS				
Reference Handbook of Software Quality Assurance 3rd Edition, G. Gordon Schulmeyer and James I. McManus and JPL's Software Reviews Handbook.				

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COMMENTS PAGE _____ of _____

#	Comments from assessment

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